IN THE CLAIMS:

Please amend Claim 1, 3-8 and 10-24 as follows:

1. (Currently Amended) A method of inserting a message in a subset of digital data representing physical quantities, characterised in that the method includes the steps of:

a) estimating a capacity to receive a message for said subset,

b) selecting, based on a size of the message compared to the estimated capacity and from a set of messages representing a same message with each having a different number of bits, a message having a size less than or equal to the estimated capacity, and

c) inserting the selected message in the said subset of digital data.

2. (Previously Presented) The insertion method according to Claim 1, characterised in that it includes a prior step of producing the set of messages, and said set includes messages having different sizes.

3. (Currently Amended) The insertion method according to Claim 2 1, characterised in that each message in the set that is of a size that is not the largest in the set is deducible from another message with a larger size that is included in the set of messages.

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4. (Currently Amended) The insertion method according to Claim 3 1, characterised in that the message is selected so that its size is just less than or equal to the estimated capacity for said subset of digital data.

5. (Currently Amended) The insertion method according to Claim 4 1, characterised in that said subset of digital data has an arbitrary shape.

6. (Currently Amended) The insertion method according to Claim 5 1, characterised in that said subset of digital data corresponds to an object characterizing a semantic entity of the set of digital data.

7. (Currently Amended) The insertion method according to Claim 6 1, characterised in that it also includes the prior steps of:

segmenting the digital data into regions, and

selecting at least one region in order to constitute said subset.

8. (Currently Amended) The insertion method according to Claim 7 1, characterised in that step (c) includes, for each element of the message, the choice of coefficients in said subset and the modulation of the element on the values of the chosen coefficients.

9. (Previously Presented) The insertion method according to any one of Claims 1 to 8, characterised in that step (a) includes the calculating of the minimum

10. (Currently Amended) The insertion method according to Claim 7 1, characterised in that it includes steps of:

segmenting the subset into blocks and

transforming the blocks by means of a reversible transformation, prior to step (c),

and wherein step (c) includes the steps of:

selecting a group of coefficients in a transformed block, for an element of the message to be inserted, and

coding the element to be inserted according to the relative values of the coefficients of the selected group.

11. (Previously Presented) The insertion method according to Claim 10 1, characterised in that step (a) includes searching for the number of usable groups according to a predetermined rule.

12. (Currently Amended) A method of extracting a message inserted by the method of Claim 1, in from a subset of digital data representing physical quantities, characterised in that it includes steps of:

extracting the message,

comparing the extracted message with messages stored in memory, and

identifying the fact that the extracted message belongs to a set of stored messages representing a same message with each having a different number of bits.

13. (Currently Amended) A device for inserting a message in a subset of digital data representing physical quantities, characterised in that it comprises:

means ~~of~~ <u>for</u> estimating a capacity to receive a message for said subset,

means ~~of~~ <u>for</u> selecting, <u>based on a size of the message compared to the estimated capacity and from a set of messages representing a same message with each having a different number of bits,</u> a message with a size less than or equal to the estimated capacity, in a set of messages, and

means ~~of~~ <u>for</u> inserting the selected message in the said subset of digital data.

14. (Currently Amended) The insertion device according to Claim 13, characterised in that it also comprises means ~~of~~ <u>for</u> producing the set of messages, and said set includes messages having different sizes.

15. (Currently Amended) The insertion device according to Claim 14, characterised in that the means ~~of~~ <u>for</u> producing ~~are~~ <u>is</u> adapted to form each message with a size that is not the largest in the set of messages so as to be deducible from another message with a greater size and included in the set of messages.

16. (Currently Amended) The insertion device according to Claim ~~15~~ <u>13</u>, characterised in that the means ~~of~~ <u>for</u> selecting ~~are~~ <u>is</u> adapted to select the message so that its size is just less than or equal to the estimated capacity for said subset of digital data.

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17. (Currently Amended) The insertion device according to Claim ~~16~~ 13, characterised in that it is adapted to consider a subset of digital data that is arbitrary in shape.

18. (Currently Amended) The insertion device according to Claim ~~17~~ 13, characterised in that it is adapted to consider a subset of digital data that corresponds to an object characterizing a semantic entity of the set of digital data.

19. (Currently Amendede) The insertion device according to Claim ~~18~~ 13, characterised in that it also comprises:

means ~~of~~ for segmenting the digital data into regions and

means ~~of~~ for selecting at least one region in order to constitute said subset.

20. (Currently Amended) The insertion device according to Claim ~~19~~ 13, characterised in that the means ~~of~~ for inserting the selected message ~~are~~ is adapted to make, for each element of the message, the choice of coefficients in said subset and the modulation of the element on the values of the chosen coefficients.

21. (Currently Amended) The insertion device according to Claim ~~20~~ 13, characterized in that the means ~~of~~ for estimating a capacity ~~are~~ is adapted to calculate the minimum number of coefficients necessary for inserting a message element so as to be able to detect this element with a predetermined correct detection probability.

22. (Currently Amended) The insertion device according to Claim ~~19~~ 13, characterized in that it also comprises:

means ~~of~~ for segmenting the subset into blocks and

means ~~of~~ for transforming the block by means of a reversible transformation, prior to the insertion step,

and wherein the means ~~of~~ for inserting the selected message comprises:

means ~~of~~ for selecting a group of coefficients in a transformed block, for an element of the message to be inserted, and

means ~~of~~ for coding the element to be inserted according to the relative values of the coefficients of the selected group.

23. (Currently Amended) The insertion device according to Claim ~~22~~ 13, characterised in that the means ~~of~~ for estimating a capacity ~~are~~ is adapted to seek the number of groups that can be used according to a predetermined rule.

24. (Currently Amended) A device for extracting a message ~~inserted by the device according to Claim 13, in~~ from a subset of digital data representing physical quantities, characterised in that the device for extracting comprises:

means ~~of~~ for extracting the message,

means ~~of~~ for comparing the extracted message with messages stored in memory and

means ~~of~~ for identifying the fact that the extracted message belongs to a set of stored messages representing a same message with each having different number of bits.

25. (Previously Presented) The insertion device according to any one of Claim 13 to 23, characterised in that the estimation, selection and insertion means are incorporated in:

a microprocessor,

a read-only memory containing a program for processing the data, and

a random access memory containing registers adapted to record variables modified during the running of said program.

26. (Previously Presented) The extraction device according to Claim 24, characterised in that the extraction, comparison and identification means are incorporated in:

a microprocessor,

a read-only memory containing a program for processing the data, and

a random access memory containing registers adapted to record variables modified during the running of said program.

27. (Previously Presented) A digital signal processing apparatus, characterised in that it comprises means adapted to implement the insertion method of Claim 1.

28. (Previously Presented) A digital signal processing apparatus, characterised in that it comprises the insertion device of Claim 13.

29. (Previously Presented) A storage medium storing a program for implementing the insertion method of Claim 1.

30. (Previously Presented) The storage medium according to Claim 29, characterised in that said storage medium is detachably mountable on an insertion device according to Claim 13.

31. (Previously Presented) The storage medium according to Claim 29 or 30, characterised in that said storage medium is a floppy disk or a CD-ROM.

32. (Previously Presented) A computer program on a storage medium and comprising computer executable instruction for causing a computer to insert a message in a subset of digital data representing physical quantities according to the insertion method of Claim 11.

33. (Previously Presented) A computer program on a storage medium and comprising computer executable instructions for causing a computer to extract a message inserted in a subset of digital data representing physical quantities according to the extracting method of Claim 12.